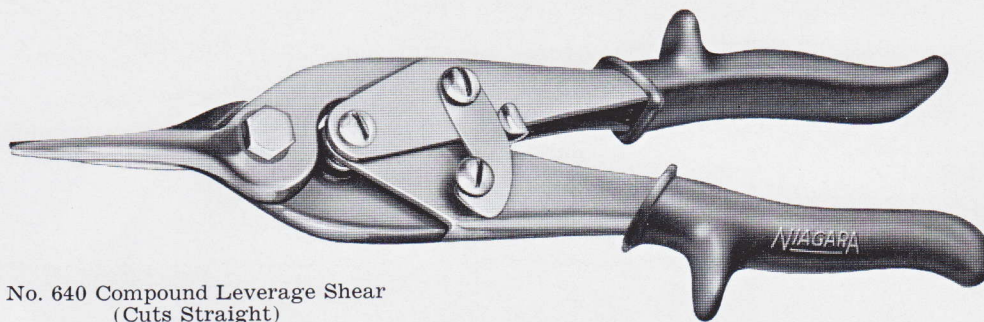


NIAGARA

HAND TOOLS for sheet metal work

BULLETIN 78-B



No. 640 Compound Leverage Shear
(Cuts Straight)

Niagara Compound Leverage Shears multiply hand pressure to provide amazing cutting power with minimum effort. Steel, up to 18 gage, can be cut accurately with ease.

Featuring 52 serrations to the inch, drop forged steel jaws are curved to divert the sheared metal — an especially important feature for cutting inside holes and intricate patterns.

Comfortable to hold, pliable vinyl plastic hand grips feature stop posts for two purposes:

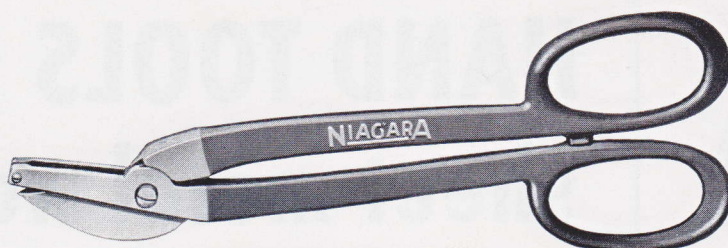
1. To prevent hand slippage and thereby keep fingers correctly positioned for maximum leverage.
2. To provide finger clearance when working against a bench top or other surface.

With three models available for cutting either to the right or to the left, or for cutting straight, Compound Leverage Shears can be used for a wide variety of jobs. So shears can be quickly identified on a work bench or in a tool chest, hand grips are furnished in three colors: Yellow—cuts straight; green—cuts right; red—cuts left.

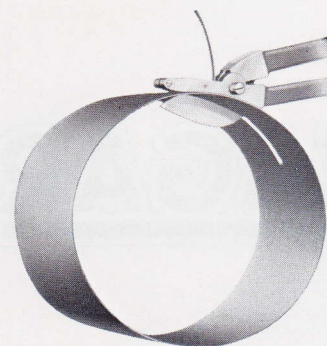


No. 641
Cuts Right

No. 642
Cuts Left



No. 623 Double Cutting Shear



Niagara Double Cutting Shears are designed for cutting sheet metal cylinders (such as stove pipe) to length, or for cutting holes in sheet metal.

The sharp pointed lower blade is pushed through the metal to start the cut. A strip is cut out between the two pieces, leaving both edges smooth and undistorted. Lower blade is

of tool steel, with parallel cutting edges which operate against two steel laid cutting edges in the slotted upper jaw.

An adjusting screw, at the outer end of upper jaw, maintains proper contact between cutting edges of upper and lower blades. The handles are drop forged.



No. 646 Straight Snips

Niagara Straight Snips, adjusted accurately for long, smooth cuts, are of drop forged steel for strength and durability. Jaws are hollow

ground and heat treated to insure long-lasting, keen cutting edges.

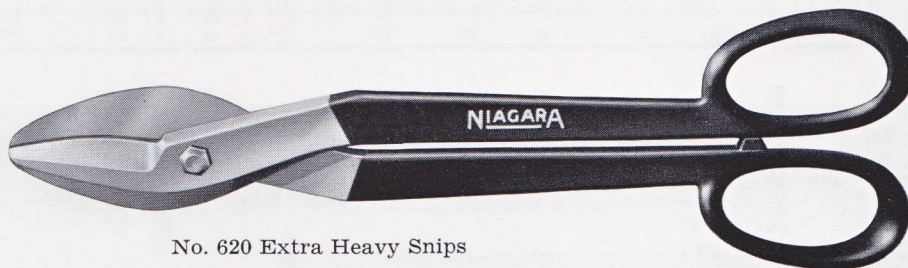


No. 656 Combination Snips

Niagara Combination Snips, especially designed for intricate patterns and scrolls, as well as straight work, are of drop forged steel for strength and durability. Inner faces of the "Duck Bill" jaws are sloped for cutting curves and irregular shapes with ease. Jaws

are hollow ground, heat treated and hand polished.

Because they are adaptable to so many jobs, Combination Snips prove extremely useful when an assortment of specialty snips is not readily available.



No. 620 Extra Heavy Snips

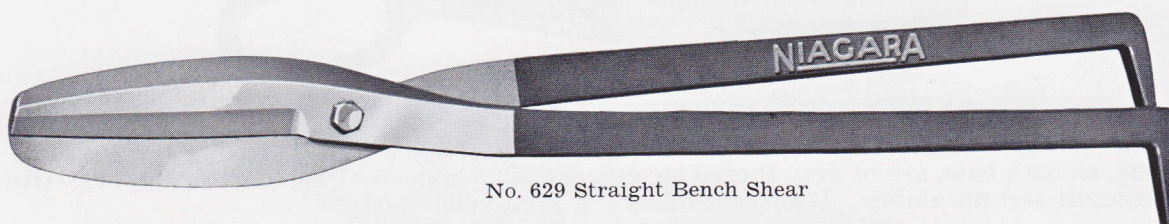
Niagara Extra Heavy Snips cut 16 gage steel with ordinary effort.

High carbon tool steel inlays of extraordinary cutting quality are welded to the drop forged steel jaws and correctly hardened for durability and ease of cutting. Special attention is given to grinding and fitting. Jaws are

heavy, short and powerful. Handles are long for maximum leverage. With handle bows shaped to fit the hand, a powerful grip can be exerted without discomfort. No set of tools is complete without a pair of Niagara Extra Heavy Snips.

Model No.	620	623	640	641	642	645	646	647	655	656	657
Type	Extra Heavy	Double Cutting	Compound Leverage			Straight			Combination		
			Cuts Straight	Cuts Right	Cuts Left						
Trade Reference	No. 5 Bulldog		Aviation								
*Normal Duty Rating, Mild Steel.. Gage No.	16	24	18	18	18	25	22	20	25	23	21
Length of cut..... Inches	2½	2	1½	1¾	1¾	2	2¾	3	2	2¼	3
Length overall..... Inches	16	13½	10	10	10	7	10	12¾	7	10	12¾
Net Weight..... Pounds	4	2¾	1	1	1	½	1	1½	½	1	1½

* Heavier work can be cut with more than normal hand pressure.



No. 629 Straight Bench Shear

Designed for heavy duty work, Niagara Bench Shears have forged steel jaws of greater cutting length than snips. Handles, of smooth, forged steel with rounded corners, are also longer to give greater leverage. Bearing surfaces are carefully ground and fitted to keep cutting edges in correct relationship without binding or undue friction. Cutting edges are of tool steel, welded to the jaws, hardened and ground.

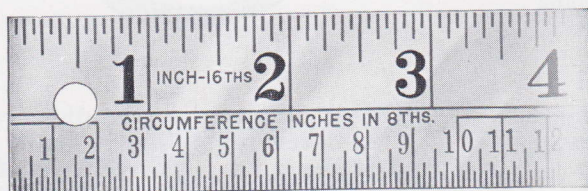
Niagara Bench Shears can be used with facility by left or right handed operators. The lower shank is made to fit a bench plate (See page 7). When so held, the shears can be operated with one hand, while the other hand guides the work. The upper shank limits the downward motion of the handle and provides

clearance for fingers when the shear is closed. The upper cutting edge is located on the right side of the jaw.

Straight Bench Shears are heavy duty sheet metal cutting tools for straight line work.

Elbow Bench Shears are similar to Straight Bench Shears (illustrated above). They are so named because they are often used for cutting large elbow sections of heavy sheet metal, however, they can be used for straight as well as curved or irregular cuts in general sheet metal work. The jaws are straight, with inner faces sloped back, to provide clearance when cutting curves or changing direction of cut.

STRAIGHT BENCH SHEARS								ELBOW BENCH SHEARS		
Model No.	627	628	629	630	632	633	634	635	636	637
Trade Reference	00	0	1	2	4	5	6	A	B	C
Capacity, mild steel . . . Gage No.	18	18	18	19	20	21	22	18	16	14
Length of cut inches	11	9½	8	7¾	7½	6	5½	4¾	6¼	7½
Length overall inches	47	41	36	34	30	27	24½	26	33½	44½
Net weight pounds	41	36	26	24	13	10	9	11	19	38



A Circumference Rule for use in sheet metal layout work. One edge is graduated in inches. Opposite edge shows the circumferential equivalent.

Reverse side gives information regarding sizes of cans, measures and pails of various capacities. These rules are made of tempered steel finished plain or nickel plated.

Model No.	788	789	793	794
Type	Plain	Nickel	Plain	Nickel
Length inches	36	36	48	48
Thickness and width . . . inches	1/16 x 1 1/4	1/16 x 1 1/4	1/16 x 1 1/4	1/16 x 1 1/4
Net weight ounces	13	13	18	18



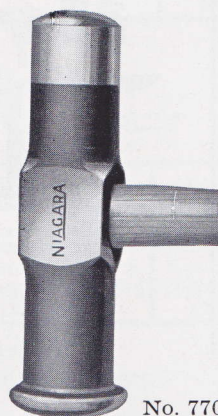
Niagara Straight Edge is made of high carbon hot rolled steel. Bevel edge is rolled to a thickness of 3/32 inch and working edge is ground true.

Model No.	625
Length feet	8
Thickness, width inches	1/4 x 2 1/4
Net weight pounds	14

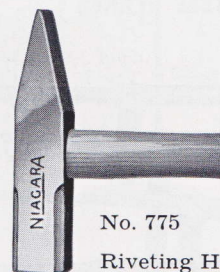
Raising Hammers produce convex or concave formations in sheet metal by a series of blows. The metal is laid on a concave hardwood block called a raising block. Niagara Raising Hammers are steel with working faces carefully ground and polished. Handles are selected hickory, rounded and smoothly finished. Correct length gives balance in swinging.

Riveting Hammers are ideal for rivet heading. The tapered end is used for breaking down the rivet end and the opposite face for smoothing and finishing. Heat treated steel hammer heads are secured to smooth hickory handles with steel wedges.

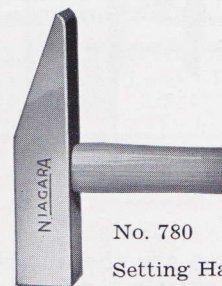
Setting Hammers are designed for laying down, clinching, or tucking in edges of sheet metal and have a particular sphere of usefulness in double seaming operation. The face is square. Heat treated steel hammer heads are secured to smooth hickory handles with steel wedges.



No. 770
Raising Hammer



No. 775
Riveting Hammer



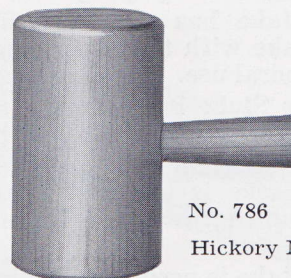
No. 780
Setting Hammer

Model No.	770	771	772	773	774	775	776	777	780	781	782
Type	Raising				Riveting				Setting		
Trade Reference	1	2	3	4	1	2	3	4	2	3	4
Diameter large face inches	2 1/4	2 1/8	1 3/4	1 3/8	—	—	—	—	—	—	—
Diameter small face inches	1 3/8	1 1/2	1 3/8	1 1/8	—	—	—	—	—	—	—
Size of square face (nominal) inches	—	—	—	—	1 1/8	1	7/8	3/4	1	7/8	3/4
Net weight	5 lbs.	4 lbs.	3 lbs.	2 lbs.	27 oz.	24 oz.	17 oz.	12 oz.	24 oz.	17 oz.	12 oz.

Hickory Mallets are used where steel hammers would deface the work.

Niagara mallets are made of carefully selected hickory which is thoroughly seasoned and free from defects.

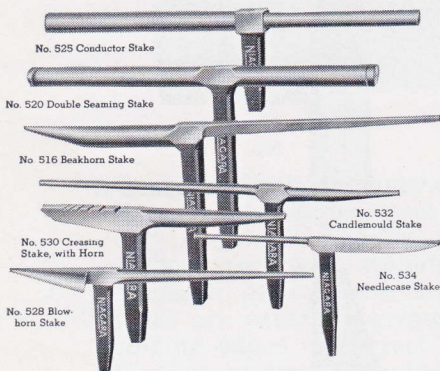
The smoothly finished handle is proportioned to the head for correct balance. Head is secured to handle by a special wedge method which avoids splitting the head. Faces are slightly crowned with rounded edges.



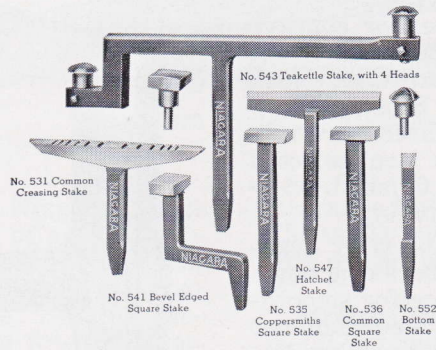
No. 786
Hickory Mallet

Model No.	784	784-A	784-B	784-C	785	786	787
Face diameter inches	2	2 1/4	2 1/2	2 3/4	3	3 1/2	4
Head length inches	5	5 1/4	5 1/2	5 3/4	6	6	6
Overall length inches	10 3/4	11	11 1/4	11 1/2	11 3/4	14 1/4	14 3/4
Net weight ounces	13	16	19	22	26	31	37

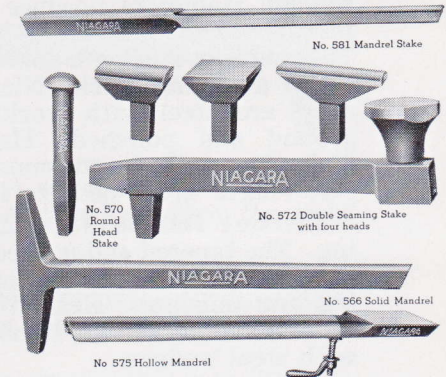
STEEL STAKES



STEEL STAKES



CAST IRON STAKES



Stakes are the anvils of the sheet metal worker. Together with hammer, mallet, grooving tool and rivet set, they enable numerous sheet metal operations such as tube forming, taper forming, flanging, side and circular seaming, box and pail seaming, riveting, etc. The good mechanic regards stakes as essential equipment and resorts to a stake whenever a suitable machine is not available. Often he can use stakes to overcome many problems for which machines are not readily adaptable.

All Niagara Steel Stakes are clean cut, smooth, sharp and polished. Hardened tool steel faces are furnished on some styles. Shanks fit in bench plates. (Page 7).

STEEL STAKES

Conductor Stakes have two cylindrical horns for the forming and seaming of pipes and other cylindrical pieces.

Double Seaming Stake is used when laying down bottom seams of vessels. Hardened tool steel face.

Beakhorn Stakes are general purpose anvils for riveting, shaping round and flat surface work, straight bending, corner seam closing, etc. Hardened tool steel faces.

Candle Mould Stake has a round, tapering, general purpose horn and a slender horn for tube forming or reshaping.

Creasing Stake has one horn like common creasing stake with the other round and tapered for general use. Hardened tool steel face.

Needle Case Stake has a round, slender horn for small tubes with a heavier horn of rectangular cross section.

Blowhorn Stake is used for shaping abrupt tapers on apron, or taper tubes on slender horn.

Teakettle Stake is used for seaming vessels of the teakettle type. Has four interchangeable heads.

Common Creasing Stake is employed in certain turning, wiring and beading requirements. Hardened tool steel face.

Hatchet Stakes are used for making straight, sharp bends, folding and edge bending. Hardened tool steel edges.

Square Stakes. General Utility flat square anvils in three sizes: Large, Common, Small. Bevel Edged has offset shank so large work will clear the bench. Coppersmith's has one end of head rounded. All except Small Square have hardened steel heads.

Bottom Stakes are used for burring or flanging circular bottoms. Hardened tool steel edges.

CAST IRON STAKES

Mandrel Stake is popular for pipe seaming. Reversible. Working surfaces on both sides of horn. Must be secured to the bench by U bolts or straps. These are not furnished with the mandrel.

Round Head Stake has head with rounded working surface. Shank for Bench Plate.

Double Seaming Stake with Four Heads is employed when double seaming large work. Can be used horizontally as illustrated, or vertically with a head in the end. Two shanks for Bench Plate.

Solid Mandrels are used for forming or for operations on cylindrical work. This mandrel is reversible with two working surfaces and two shanks for holding in a Bench Plate.

Hollow Mandrels are popular for pipe forming and seaming. Also have useful square faced working ends. Tee slot full length and clamping bolt (furnished) provide great latitude in fastening stakes to bench.

NIAGARA STEEL STAKES

Model No.	516	517	520*	525	558	528	530**	532	534
Type.....	Beakhorn		Double Seaming	Conductor		Blow-horn	Creasing with Horn	Candle Mould	Needle Case
Horn lengths†.....inches	21 1/2, 16 1/2	19, 14 1/2	17, 12	20, 14	15, 12	18, 9	11 1/2, 6 3/4	18, 9 1/2	10 1/2, 8
Long horn at shank.....inches	2 3/16 x 1 1/8	2 x 1	1 7/8	2	2 1/2	1 1/2	1 1/2	1 1/8	5/8
Long horn at end.....inches	1 9/16 x 1/2	1 1/4 x 1/2	1 7/8	2	2 1/2	3/8	3/8	1/2	7/16
Short horn at shank.....inches	2 3/16	2	1 7/8	1 1/2	1 1/4	4 3/4 wide	1 1/2 x 1 3/4	1 1/8	1 5/16 x 1
Short horn at end.....inches	3/4	5/8	1 7/8	1 1/2	1 1/4	3/8 wide	1 1/2 x 1/4	3/8	1 5/16 x 1/8
Net weight.....pounds	39	28	39	38	33	16	14	10	5

†Horn lengths measured from shanks to ends.

*Double seaming stake, has oval ends, inches, 3 1/4 x 2 and 2 7/8 x 1 7/8.

**Has six wire grooves, diameters, inches 1/8, 5/32, 3/16, 1/4, 5/16, 11/32.

Model No.	543*	545	547	548	552	554	531**	535	536	537	538	540	541
Type.....	Tea-kettle	Hatchet			Bottom		Common Creasing	Copper-smiths Square	Common Square	Large Square	Small Square	Bevel Edge Sq.	
Size work face.....inches	4 Heads	11	8	7	1 3/4 x 3/32	1 1/4 x 1/8	14 1/2 x 1 9/16	2 1/2 x 4 1/2	2 1/2 x 4 1/2	3 1/2 x 5 1/2	1 1/2 x 2 3/8	Large 3x5	Small 2 1/2 x 4 1/2
Net weight.....pounds	53	11	9	8	4	3	11	12	12	17	4	15	14

*Size of heads, inches 2 x 3, 2 1/4 dia., 2 3/8 dia., 2 9/16 dia. with groove.

**Has two grooves each of following diameters 1/8, 5/32, 3/16, 1/4, 5/16, 11/32 inches.

NIAGARA CAST IRON STAKES

Model No.	563	565	566	570	572*	575	576	581
Type.....	Solid Mandrel			Round Head	Double Seaming with 4 Heads	Hollow Mandrel		Mandrel
Length overall.....inches	43 1/4	36 7/8	33 1/8	13 1/4	30 3/4	41	60	44 3/4
Head diameter.....inches				3 1/4				
Flat side, width and length.....inches	2 5/8 x 40	2 1/2 x 34	2 1/4 x 30			5 1/2 x 9	6 3/4 x 10 1/2	2 3/4 x 17 3/4
Rounded end radius and length.....inches	1 3/8 x 40	1 1/4 x 34	1 1/8 x 30			2 x 31	2 1/2 x 48	1 1/2 & 3 x 26
Net weight.....pounds	90	68	46	10	125	52	93	61

*Head sizes: Round — 6" diameter x 4 3/8" height; Square — 4 1/4" width x 5 1/2" length x 2 1/2" height;
 Short Oval — 3 5/8" and 4" width x 5 5/8" length x 2 1/2" height;
 Long Oval — 2 3/8" and 2 3/4" width x 8 1/4" length x 2 1/2" height.

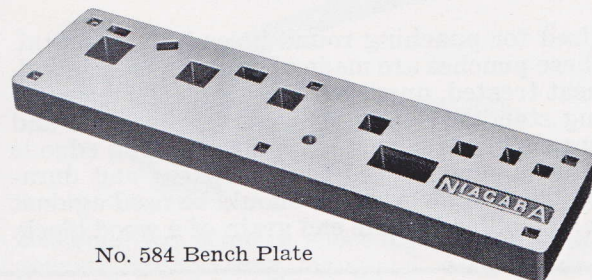
NIAGARA

BENCH PLATES

Stationary Bench Plates serve as rigid mountings for stakes, bench shears, etc. Made of close grained cast iron, they can be set up for temporary use or permanently mounted on top of a bench, or, if desired, recessed in a bench as must be done with types which do not have a stiffening rib around the periphery.

The top of the stationary Bench Plate is smooth with cored holes of various sizes which are smooth and tapered to fit the stake shanks. Smaller holes are provided for bench shears. Countersunk mounting holes are provided for bolting to bench.

Revolving Bench Plate is more compact than the stationary plate. The center portion can be rotated to the desired position and locked by the clamping handle underneath.



No. 584 Bench Plate

Model No.	583	584	585	586
Type.....	Stationary			Revolving
Trade Reference.....	0	1	2	—
Length.....inches	48	37	30	9
Width.....inches	12	8	8	9
Net weight.....pounds	112	55	42	22

Niagara Rivet Sets are well proportioned to the rivets to be headed. They are made of alloy steel, heat treated and plated with a bright finish. The top is tough to withstand hammer blows. The bottom is hard so the hole which punches the metal and draws it to the rivet head, stays sharp. The rounded depression forms a nicely shaped head.

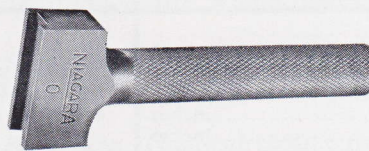


No. 682 Rivet Set and Header

Model No.	680	681	682	683	684	685	686	687	688	689
Trade Reference.....	00	0	1	2	3	4	5	6	7	8
Size of hole.....inches	$\frac{5}{16}$	$\frac{9}{32}$	$\frac{1}{4}$	$\frac{7}{32}$	$\frac{3}{16}$	$\frac{11}{64}$	$\frac{5}{32}$	$\frac{9}{64}$	$\frac{1}{8}$	$\frac{7}{64}$
For iron rivets.....pounds	14	10 & 12	8	6	4 & 5	$2\frac{1}{2}$ & 3	$1\frac{3}{4}$ & 2	$1\frac{1}{2}$	$1\frac{1}{4}$	10 & 12 oz.
Net weight.....ounces	18	18	18	11	11	11	7	7	7	7

These tools are used for flattening and offsetting folded edges to make a lock seam. Width of seam is determined by width of fold and width of groove in tool.

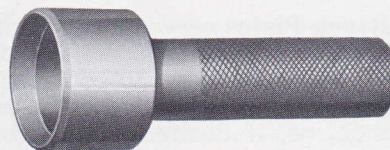
Niagara Grooving Tools are made of special carbon steel, heat treated, quenched and tempered to exacting standards. Groove and working surfaces are accurately milled. Knurled handles are finished with bright plating.



No. 707 Grooving Tool

Model No.	705	706	707	708	709	710	711	712	713	714
Trade Reference.....	00	0	1	2	3	4	5	6	7	8
Size of groove.....inches	$\frac{1}{2}$	$\frac{7}{16}$	$\frac{3}{8}$	$\frac{5}{16}$	$\frac{1}{4}$	$\frac{7}{32}$	$\frac{3}{16}$	$\frac{5}{32}$	$\frac{9}{64}$	$\frac{1}{8}$
Net weight.....ounces	18	18	18	13	13	13	9	9	9	9

Used for punching round holes in light metal, these punches are made of special carbon steel, heat treated, quenched and tempered to exacting standards. The shank is lathe turned and knurled to facilitate gripping. Cutting edge is beveled and ground for sharpness and durability. Hollow punches should be used against a slab of lead or the end grain of a wood block.



No. 732 Hollow Punch

Model No.	718	719	720	721	722	723	724	725	726	727	728
Diameter.....inches	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	$\frac{7}{8}$	1	$1\frac{1}{8}$	$1\frac{1}{4}$	$1\frac{3}{8}$	$1\frac{1}{2}$
Net weight.....ounces	5	6	7	10	11	12	16	17	21	26	28

Model No.	729	730	731	732	733	734	735	736	737	738	739	740
Diameter.....inches	$1\frac{5}{8}$	$1\frac{3}{4}$	$1\frac{7}{8}$	2	$2\frac{1}{8}$	$2\frac{1}{4}$	$2\frac{3}{8}$	$2\frac{1}{2}$	$2\frac{5}{8}$	$2\frac{3}{4}$	$2\frac{7}{8}$	3
Net weight.....pounds	2	2	3	3	3	4	4	4	5	5	5	6

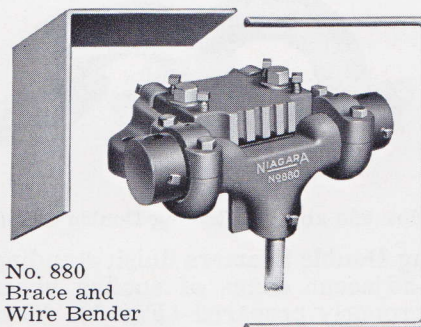
NIAGARA

BENDING MACHINE

Used for bending jobs that cannot be performed successfully with folders and brakes, this machine can be adjusted to make sharp or rounded bends in light or heavy strip stock and wire.

The bending plate is reversible for flat or wire bending and has screw adjustment for thickness of material or radius of bend.

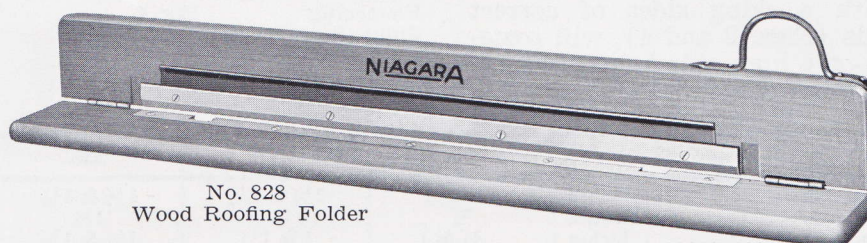
Model No.	880
Maximum thickness and width can be bent, mild steel.....inches	$\frac{1}{4} \times 3\frac{1}{2}$
Minimum including angle of bend...degrees	90
Grooves for wire, diameter.....inches	$\frac{1}{2}, \frac{7}{16}, \frac{3}{8}, \frac{1}{4}$
Shipping weight (approx.).....pounds	90



No. 880
Brace and
Wire Bender

NIAGARA

WOOD ROOFING FOLDER



No. 828
Wood Roofing Folder

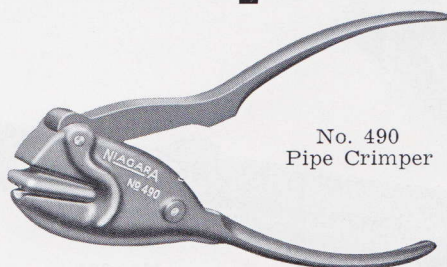
Designed to fold the edges of light metal, this portable folder can be used to prepare the four edges of roofing tin so the edges can be hooked and flattened to form a lock seam.

The steel folding blades, which are fastened to a wood frame, have recesses for clearing previously-folded edges on the two adjacent sides. An adjustable gage is provided.

Model No.	828
Capacity, mild steel...Gage No.	30
Width of locks.....inches	$\frac{3}{16}$ to $\frac{3}{8}$
Length of fold.....inches	30
Shipping weight (approx.) pounds	16

NIAGARA

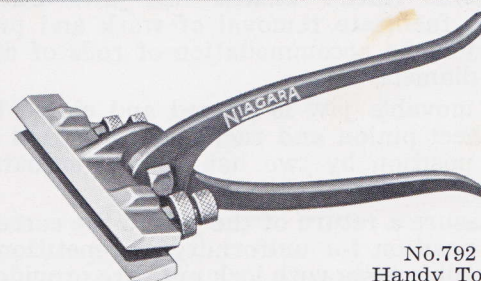
PIPE CRIMPER & HANDY TONG



No. 490
Pipe Crimper

This small, well-constructed tool is used for reducing the diameters of the ends of sheet metal pipe by crimping. Because it is portable, it is ideally suited for pipe crimping at the job site.

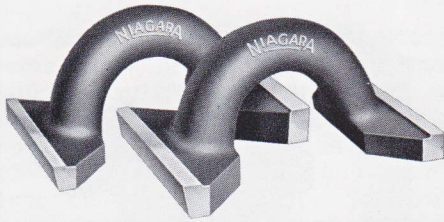
Model No.	490
Capacity, mild steel.....Gage No.	22
Length of crimp.....inches	$1\frac{1}{8}$
Net weight.....pounds	3



No. 792
Handy Tong

Designed for bending sheet metal, this small, general utility tong, equipped with locking adjustable gage, is useful in the shop as well as for incidental work on the job.

Model No.	792
Capacity mild steel.....Gage No.	28
Gaging range.....inches	$\frac{3}{8}$ to $1\frac{1}{8}$
Working length.....inches	$6\frac{1}{2}$
Length of handles from pivot.....inches	$8\frac{1}{2}$
Net weight.....pounds	3

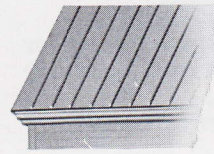


Nos. 836 and 837 Roofing Double Seamers

Roofing Double Seamers finish standing seams after adjacent edges of roofing sheets have been properly prepared (Fig. 1). These tools back up the metal as the actual bending is done with a mallet.

Two seamers comprise a set. Low side of first tool is used in making bend, (Fig. 2), high side for the flattening operation (Fig. 3). The second tool, similarly used, finishes the seam (Figs. 4 and 5).

One tool with working sides of correct height for bends (Figs. 2 and 4), will sometimes suffice, — the high side being used for flattening operations (Figs. 3 and 5).



Standing Seam Roof

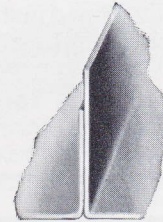


Fig. 1 Preparation

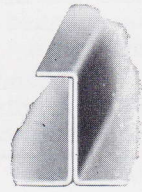


Fig. 2 First Bend

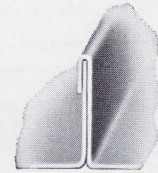


Fig. 3 Flattening Single Seam

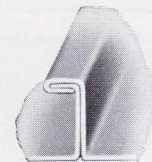


Fig. 4 Second Bend

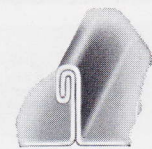


Fig. 5 Flattening

Model No.	836	837	838	839
Width of prepared roof edges inches	1 & 1/4	1 1/4 & 1 1/2	1 1/2 & 1 3/4	1 3/4 & 2
Height of seam inches	3/4	1	1 1/4	1 1/2
Height of working sides inches	3/4 & 1	1 & 1 1/4	1 1/4 & 1 1/2	1 1/2 & 1 3/4
Length of working sides, approx. inches	6	6	6	6
Net weight, each pounds	8	9	11	12

No. 837 and 836 used in order named for common gage seam, 3/4".

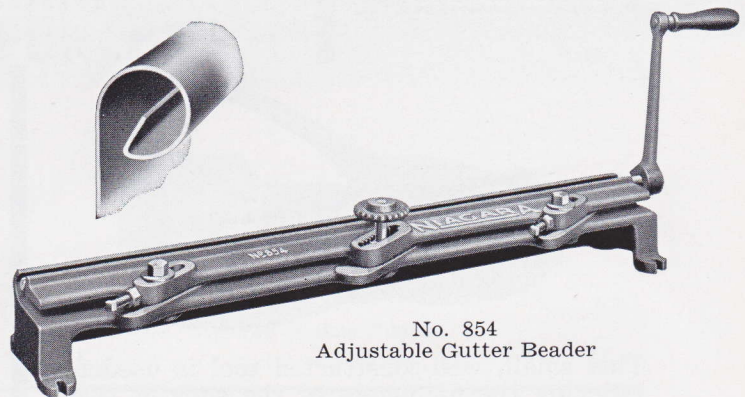
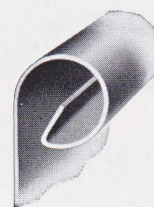
No. 838 and 837 used in order named for wide gage seam, 1".

No. 839 and 838 used in order named for extra wide gage seam, 1 1/4".

Adjustable Gutter Beader has jaws which open to facilitate removal of work and provision for the accommodation of rods of different diameters.

The movable jaw is opened and closed by handwheel pinion and rack, and is locked in closed position by two hand wheel actuated screws.

To assure a return of the jaw to the correct closed position for uniformity of repetitional work, stop screws with lock nuts are provided. Light work may be slid out of the jaws without opening them.



No. 854 Adjustable Gutter Beader

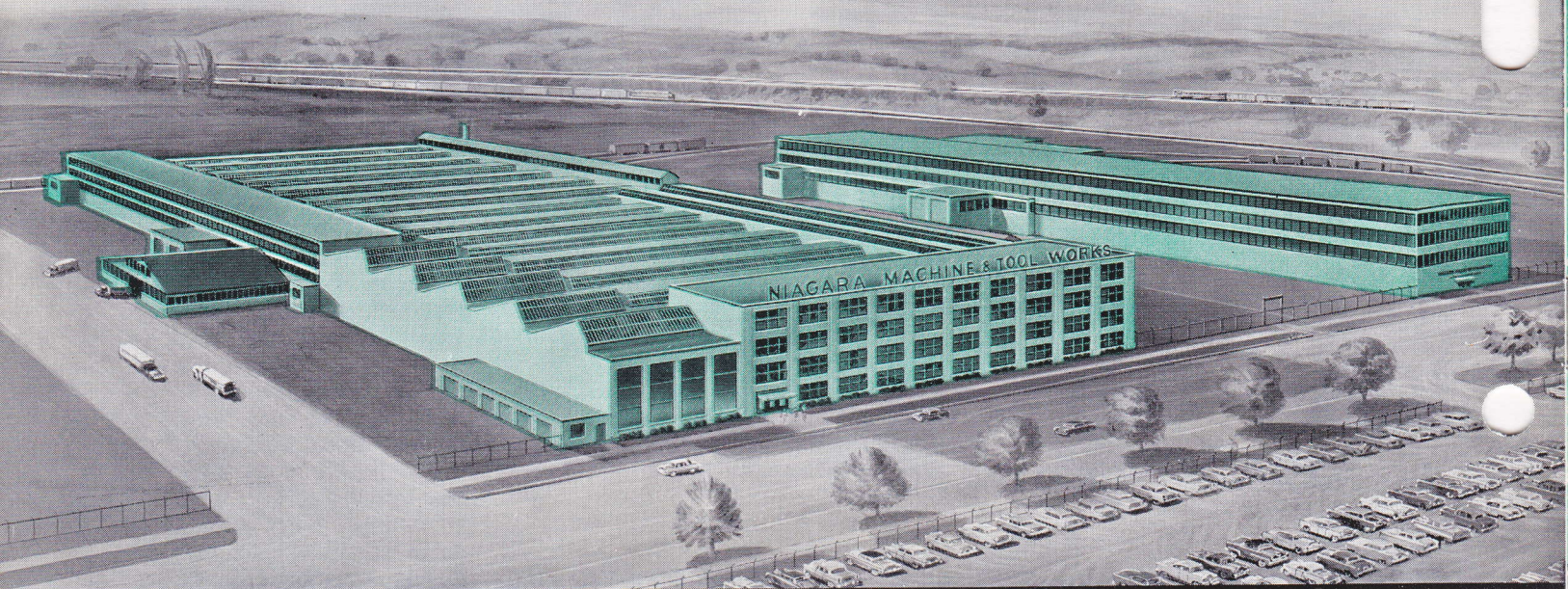
Model No.	854
Type	
Working length inches	30
*Jaws adjustable for rods, diameter inches	3/8 to 3/4
Capacity, mild steel, with 3/8" diameter rod . . . Gage No.	26
Capacity, mild steel, with 1/2" diameter rod . . . Gage No.	26
Capacity, mild steel, with 5/8" diameter rod . . . Gage No.	24
Shipping weight pounds	65

*Unless otherwise ordered 1/2" will be furnished. Rods 3/8", 5/8" or 3/4" in diameter can be supplied from stock, and substituted at no extra charge.

Special diameter rods furnished at extra charge.

The 3/8" rod has slot 1/32" wide, 3/16" deep; all other sizes, slot is 3/64" wide, 1/4" deep.

NIAGARA



America's most complete line of presses, shears, machines and tools for plate and sheet metal work

DRUM MAKING EQUIPMENT

ELECTRONIC AUTOMATIC WELDER

FOLDERS — BRAKES

Adjustable Bar Folders
Universal Folders and Brakes

GROOVERS and SEAMERS

HAND or FOOT OPERATED SHEARS

Circle Shears	Foot Squaring Shears
Foot Curved Shears	Ring Shears
Foot Gap Shears	Rotary Slitting Shears

HAND TOOLS

Bench Plates	Hollow Punches
Bench Shears	Rivet Sets
Hammers	Snips
Hand Groovers	Stakes

LEVER SHEARS and PUNCHES

Bar and Rod Cutters	Lever Punches
Combination Lever	Lever Shears
Punches and Shears	Notchers

POWER PRESSES

Bench Presses
Foot Presses
Gap Frame Double Crank Presses
Gap Frame Single Crank Presses
Horn Presses — Side Seamers
Hydraulic Presses

Inclinable Gap Frame Double Crank Presses
Inclinable Presses
Straight Side Double Crank Presses
Straight Side Eccentric Geared Presses
Straight Side Single Crank Presses

POWER PRESS BRAKES

POWER ROTARY SHEARS

Power Circle Shears
Power Circle Shears and Flangers
Power Ring and Circle Shears

POWER SQUARING SHEARS

Air Power Squaring Shears
Economy Line Power Squaring Shears
(14 Gage Max.)
Gap Frame Overdrive Power Squaring Shears
Light Gage High Speed Power Squaring Shears
Underdrive Precision Type Heavy Duty
Power Shears

ROTARY MACHINES

Bending	Forming and Curving
Burring	Machines
Combination Machines	Multi-Drive Table
Corrugating	for Rotary Machines
Crimping	Setting Down Machines
Edging	Turning
Flanging	Wiring

SLIP ROLL FORMERS

Hand and Power Machines

NIAGARA MACHINE & TOOL WORKS

General Offices and Works, 637-697 Northland Avenue, Buffalo 11, N. Y., U. S. A.

DISTRICT OFFICES: BUFFALO • CLEVELAND • DETROIT • NEW YORK • PHILADELPHIA

Dealers in principal U. S. cities and major foreign countries.